

Appl. No. 09/928,680
Amdt. Dated July 28, 2005
Response to Final Office Action of April 26, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An optical linkage device for securing a first part and a second part, the first part including a first threaded portion, and the second part including a second threaded portion that is screwable to the first threaded portion, wherein the first part and the second part may be comprised of a lens member or a body housing imaging elements, including either of a CCD sensor or a CMOS sensor, the optical linkage device comprising:

a plurality of positioning recesses that are formed at a circumference of the first part such that a plurality of said recesses are located in a one-fourth portion of the circumference;

a plurality of positioning protrusions that are formed in the second part, the positioning protrusion being selectively engageable with the recess members when threading the first part onto the second part wherein said recesses and said protrusion are rounded; and

a means for securing the first part and the second part in a permanent fixed relationship,

wherein all of said plurality of positioning protrusions are positioned in some of said plurality of positioning recesses when the first part and the second part are fixed to each other.

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2. (Previously Presented) An optical linkage device according to Claim 1, wherein the first threaded portion is an external thread, and the second part is further comprised of two or more positioning protrusions.

3. (Previously Presented) An optical linkage device according to Claim 2, wherein the second threaded portion is an internal thread.

4. (Previously Presented) An optical linkage device according to Claim 1, wherein the first part is a lens barrel.

5. (Previously Presented) An optical linkage device according to Claim 4, wherein the second part is a holder for holding the lens barrel, and further wherein an image pickup device is mounted to the holder.

6. (Previously Presented) An optical linkage device according to Claim 5, wherein, by selecting a location of engagement for the recess and the protrusion, a desired focal location between the image pickup device and the lens is achieved.

7. (Previously Presented) An optical linkage device according to Claim 5, wherein an image-forming-device focus adjustment pitch is determined at least in part by an engagement pitch between the recess and the protrusion elements.

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Claims 8-15 (Canceled).

16. (Previously Presented) An optical linkage device for securing a first part and a second part, the first part including a first threaded portion, and the second part including a second threaded portion that is screwable to the first threaded portion, wherein the first part and the second part may be comprised of a lens member or a body housing imaging elements, including either of a CCD sensor or a CMOS sensor, the optical linkage device comprising:

a plurality of positioning recesses that are formed at a circumference of the first part such that a plurality of said recesses are located in a one-fourth portion of the circumference;

a plurality of positioning protrusions that are formed in the second part, the positioning protrusion being selectively engageable with the recess members when threading the first part onto the second part wherein said recesses and said protrusion are rounded; and

wherein the threaded portion of the first part or the second part passes through a plane in which the positioning protrusion engages the recess members during assembly,

wherein all of said plurality of positioning protrusions are positioned in some of said plurality of positioning recesses when the first part and the second part are fixed to each other.

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17. (Previously Presented) An optical linkage device for securing a first part and a second part, the first part including a first threaded portion, and the second part including a second threaded portion that is screwable to the first threaded portion, wherein the first part and the second part may be comprised of a lens member or a body housing CMOS sensor, the optical linkage device comprising:

a plurality of positioning recesses that are formed at the first part;

a plurality of positioning protrusions that are formed at the second part,
the positioning protrusion being selectively engageable with one of said plurality of positioning recesses; and

wherein all of said plurality of positioning protrusions are positioned in some of said plurality of positioning recesses when the first part and the second part are fixed each other.